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(c) piling up placing the exfoliated cell layer on another cell layer formed on the same or another carrier.

7. (Canceled)

- 8. (Currently Amended) The method of elaim 5 or claim 6, wherein the alginate gel layer is composed of a calcium alginate gel.
- 9. (Currently Amended) The method of elaim 5 or claim 6, wherein the carrier further comprises an extracellular matrix component gel layer or extracellular matrix component (ECM) sponge layer which is formed on the alginate gel layer.
- 10. (Currently Amended) The method of claim 5 or claim 6, wherein the extracellular matrix component comprises a collagen.
- 11. (Currently Amended) The method of claim 5 6, further comprising forming a cell multi-layer.
- 12. (Currently Amended) The method of elaim 5 or claim 6, wherein the porous membrane comprises a filter, an ultrafiltration membrane, a silicone rubber membrane, a polytetrafluoroethylene resin porous membrane, a nonwoven fabric or a gauze-like mesh.
- 13. (Currently Amended) The method of claim 5 or claim 6, wherein the porous membrane comprises pores.
- 14. (Previously added) The method of claim 13, wherein the pores are between about 0.02 to 1000 μm.

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15. (Previously added) The method of claim 9, wherein the extracellular matrix component comprises a collagen, an elastin, a proteoglycan, a glucosaminoglycan, a fibronectin, a laminin, a vitronectin or a heparan sulfate.

- 16. (Previously added) The method of claim 9, wherein the extracellular matrix component comprises a gel comprising collagen type IV, laminin and heparan sulfate.
- 17. (Currently Amended) The method of elaim 5 or claim 6, wherein the thickness of the porous membrane is between about 0.01 to 1 mm, 0.01 to 0.1 mm, or 0.05 to 1 mm.
- 18. (Currently Amended) The method of elaim-5 or claim 6, wherein the thickness of the alginate gel layer is between about 0.1 to 3 mm, or between about 1 to 2 mm, or about 1 mm.
- 19. (Currently Amended) The method of claim 9, wherein the thickness of the extracellular matrix component gel layer is between about 0.1 to 1 mm, or between about 0.2 to 0.5 mm, or about 0.4 mm.
- 20. (Currently Amended) The method of claim 9, wherein the thickness of the extracellular matrix component sponge layer is between about 0.1 to 2 mm, or between about 0.2 to 1 mm, or about 0.5 mm.
- 21. (Currently Amended) The method of claim 5 or claim 6, wherein the cell is a fibroblast, a vascular endothelial cell, a chondrocyte, a hepatocyte, a small intestine epitheliocyte, an epidermis cornification cell, an osteoblast, a bone marrow mesenchymal cell or a fibroblast.

when from The call layer rein/a cell 22. (Currently Amended) The method of claim 5 or claim 6, wherein/a cell concentration of between about 10,000 to 15,000 cells/ml is added onto the alginate gel layer.

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23. (Currently Amended) The method of claim 5 or claim 6, further comprising detaching the cells from the porous membrane by solubilizing the alginate gel layer.

- 24. (Previously added) The method of claim 22, wherein solubilization of the alginate gel layer is carried out by use of a chelating agent.
- 25. (Previously added) The method of claim 23, wherein the chelating agent comprises a polyaminocarboxylic acid, an ethylenediaminetetraacetic acid, an ethylene glycol-bis(β-aminoethyl ether), an oxycarboxylic acids, or a citric acid.
- 26. (Previously added) A method for making a three-dimensional tissue structure comprising the following steps:
- (a) forming a cell layer on a carrier, wherein the carrier comprises a porous membrane and an alginate gel layer which is formed on the porous membrane;
- (b) solubilizing an the alginate gel layer of the carrier thereby exfoliating the cell layer from a the porous membrane of the carrier; and
- (c) piling up placing the exfoliated cell layer on another cell <u>layer</u> formed on the <u>same or</u> another carrier, thereby making a three-dimensional tissue structure.

27-28. (Canceled)

- --29. (New) The method of claim 18, wherein the thickness of the alginate gel layer is about 1 mm.
- 30. (New) The method of claim 19, wherein the thickness of the extracellular matrix component gel layer is about 0.4 mm.
- 31. (New) The method of claim 20, wherein the thickness of the extracellular matrix component sponge layer is about 0.5 mm.--

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